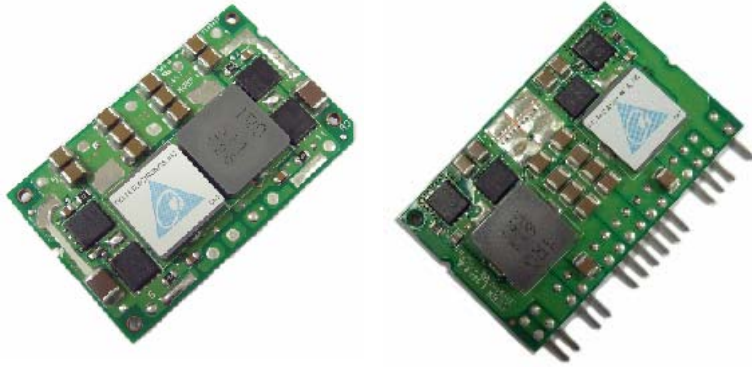


DELPHI SERIES



FEATURES

- High efficiency: 93% @ 12Vin, 3.3V/25A out
- Small size and low profile: 47.2x29.5x8.50mm (1.86"x1.16"x0.34")(SMD) 50.8x31.8x8.50mm (2.00"x1.25"x0.34")(SIP)
- Fixed frequency operation
- Output voltage programmable from 0.8Vdc to 5.5Vdc via external resistor
- Remote ON/OFF & Remote sense
- No minimum load required
- Low output ripple and noise
- Output voltage sequencing
- Input UVLO, OTP, OCP (non-latching) Output OVP (Latching)
- ISO 9001, TL 9000, ISO 14001, QS 9000, OHSAS 18001 certified manufacturing facility
- UL/cUL 60950-1 (US & Canada), and TUV (EN60950-1) - pending

Delphi Series DNQ12, Non-Isolated, Point of Load DC/DC Power Modules: 10-14Vin, 0.8V-5.5V/25A out

The Delphi series DNQ12S, 10V~14V input, single output, non-isolated point of load DC/DC converters are the latest offering from a world leader in power systems technology and manufacturing — Delta Electronics, Inc. The DNQ12S series provides a programmable output voltage from 0.8V to 5.5V using an external resistor. This product family is available in a surface mount or SIP package and provides up to 25A of current. With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance and extremely high reliability under highly stressful operating conditions.

OPTIONS

- Negative On/Off logic
- Surface mounted or SIP packages

APPLICATIONS

- Telecom/DataCom
- Distributed power architectures
- Servers and workstations
- LAN/WAN applications
- Data processing applications

SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS		
Input Voltage	Typical	10V~14V	Voltage Adjustment	Typical	0.8V ~ 5.5Vdc
Switching Frequency	Typical	500KHz	Line Regulation	Typical	± 0.01%
Turn-on time	Typical	1 mS (Tdelay), 5 mS(Trise)	Load Regulation	Typical	± 0.1%
OTP	Typical	125°C	Ripple & Noise	Typical	5mVrms, 15mVpk-pk
MTBF	Typical	3.0 Mhr	Current Limits	Typical	140%
Size (SMD)	47.2x29.5x8.5mm	1.86"x1.16"x0.34"	Size (SIP)	50.8x31.8x8.50mm	2.00"x1.25"x0.34"

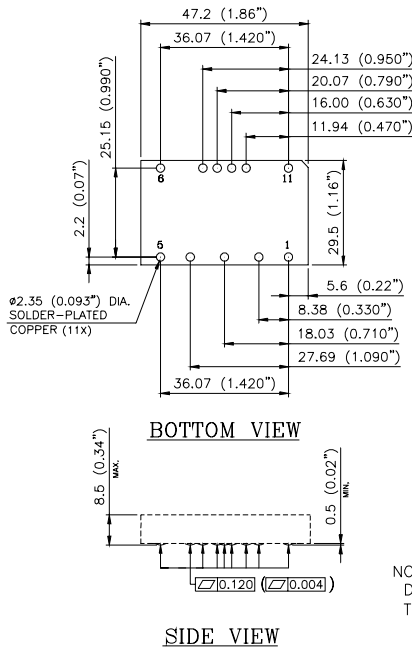
PART NUMBERING SYSTEM

DNQ	12	S	0A0	R	25	N	F	A
Product Family	Input Voltage	Number of Outputs	Output Voltage	Package Type	Output Current	On/Off Logic		Option Code
DNQ - 25A	12 - 10.0V~14.0V	S - Single	0A0 - Programmable	R - SIP S - SMD	25 - 25A	N - Negative P - Positive	F- RoHS 6/6 (Lead Free)	A - Standard Function

MODEL LIST

Model Name	Package	Input Voltage	Output Voltage	Output Current	Efficiency 12Vin, 3.3Vout @ full load
DNQ12S0A0S25PFA	SMD	10.0V ~ 14Vdc	0.8V ~ 5.5Vdc	25A	93%
DNQ12S0A0R25NFA	SIP	10.0V ~ 14Vdc	0.8V ~ 5.5Vdc	25A	93%

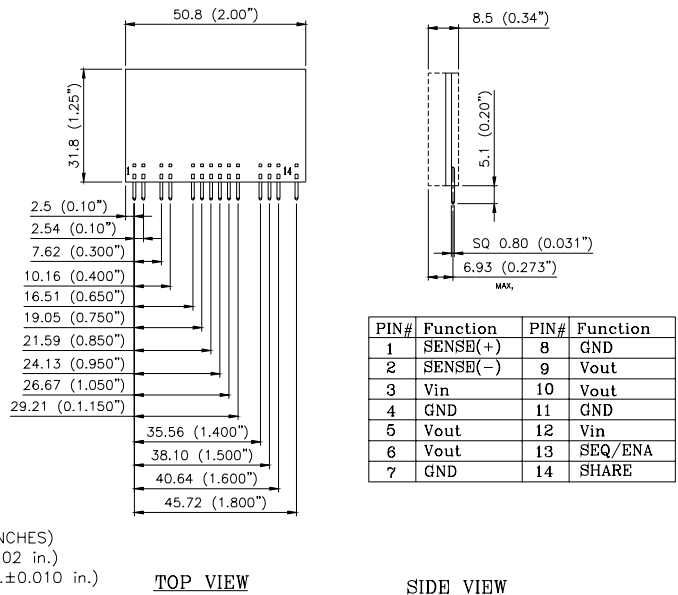
MECHANICAL DRAWING SMD PACKAGE



PIN#	Function
1	GROUND
2	Vout
3	GROUND
4	Vout
5	GROUND
6	Vin
7	SHARE
8	SENSE (+)
9	SEQ/ENA
10	SENSE (-)
11	Vin

NOTES:
DIMENSIONS ARE IN MILLIMETERS AND (INCHES)
TOLERANCES: X.Xmm±0.5mm(X.XX in.±0.02 in.)
X.XXmm±0.25mm(X.XXX in.±0.010 in.)

SIP PACKAGE



CONTACT: www.delta.com.tw/dcdc

USA:

Telephone:
East Coast: (888) 335 8201
West Coast: (888) 335 8208
Fax: (978) 656 3964
Email: DCDC@delta-corp.com

Europe:

Telephone: +41 31 998 53 11
Fax: +41 31 998 53 53
Email: DCDC@delta-es.tw

Asia & the rest of world:

Telephone: +886 3 4526107 x6220
Fax: +886 3 4513485
Email: DCDC@delta.com.tw

WARRANTY

Delta offers a two (2) year limited warranty. Complete warranty information is listed on our web site or is available upon request from Delta.

Information furnished by Delta is believed to be accurate and reliable. However, no responsibility is assumed by Delta for its use, nor for any infringements of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Delta. Delta reserves the right to revise these specifications at any time, without notice.